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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/765,263      | 01/18/2001  | William H. Zebuhr    | OPY-007.01          | 6146             |

25181 7590 04/05/2004

FOLEY HOAG, LLP  
PATENT GROUP, WORLD TRADE CENTER WEST  
155 SEAPORT BLVD  
BOSTON, MA 02110

EXAMINER

MANOHARAN, VIRGINIA

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1764

DATE MAILED: 04/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 09/765,263             | ZEBUHR, WILLIAM H.  |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Virginia Manoharan     | 1764                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02/27/03.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5,7-12,14-20 and 23-51 is/are pending in the application.
- 4a) Of the above claim(s) 30-37 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 38 is/are allowed.
- 6) ☒ Claim(s) 1-4,7,11,12,14-18,23,39-44 and 47-51 is/are rejected.
- 7) ☐ Claim(s) 5, 8-10, 19-20, 24-29 and 45-46 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

Applicant should update the **"RELATED APPLICATIONS"**, indicated at page 1, under the **"CROSS-REFERENCE TO RELATED APPLICATIONS"**, i.e., provide the applications #s, status of the application, e.g., whether abandoned, pending or allowed (the U.S. Patent Nos., if allowed) required prior to allowance of this application.

Claims 7, 11-12, 14-16, 23, 41-42 and 47-51 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) The limitation "the at least one evaporation chamber" in claim 7, line 3, lacks proper antecedent basis for support in the claims. At least, the above limitation is inconsistent with the initially recited "a plurality of evaporation chambers" in claim 47, lines 2-3, the claim from which it depends. The same hold true for claim 47, lines 26-27; claim 23; claim 51, lines 2-3 and claim 51, line 57, lines 29-30.

(c) In claim 11, line 1, the "1" as in "claim 1 48" is a typographical error and should be deleted. Likewise, in claim 19, line 1, the "compressor" should be deleted.

(d) Claim 15, lines 3-4 is already recited in claim 48, the claim from which it depends, claimed twice?

(e) The numerously recited the "evaporation chamber" (singular) are inconsistent with the "evaporation chambers" (plural). See e.g., claim 48, line 10, claims 50 & 51.

(g) Claim 49 depending on claim 49 is an error.

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 17-18, 39-40 & 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB '(757,085), Hickman(2,894,879), Shafranovsky et al (4,198,360) or Ramshaw et al (4,283,255) in view of Won(4,465,559).

The above references are applied for the same combined reasons as set forth at the previous Office of June 4, 2003, paper # 16.

Claims 5, 8-10, 19-20, 24-29 and 45-46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 7, 11-12, 14-16, 23, 41-42 and 47-51 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Claim 38 is allowed.

Applicant's arguments filed Nov. 17, 2003 have been fully considered but they are not persuasive.

Applicant's argument that "...what the Examiner appears to rely on is the theory that the claim's functional limitations do not limit its scope. But Applicant pointed out in the previous response that the Court of Appeals for the Federal Circuit has explicitly ruled just the opposite. ..." is not considered well-taken. While there is nothing wrong

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with functional or process language ,however , it is the structure that is given patentable weight in an apparatus claim. The limitation regarding the rate is more process rather than apparatus. A process limitation is not the basis for patentability of an apparatus claim. The prior art devices would read on the claimed " "a varying-rate evaporation chamber irrigation system" and therefore is capable of performing the same function as the claimed device. In fact, applicant agreed that it would be obvious to vary irrigation rates in the prior art devices. While applicant disagree , however, it is deemed also obvious to an artisan that a highest value (peak) is attained by varying the irrigation rate that would be at least twice the usual level (average) irrigation rate. Applicant fails to delineate structure not shown nor render obvious by the prior art. Claim 1, unlike claim 38, does not invoke 35 USC,112 sixth paragraph interpretation, wherein the prior art devices must perform the function specified in the claim, (corresponding more to the Court of Appeals for the Federal Circuit ruling, indicated, supra. )

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

This application contains claims 30-37 are drawn to an invention nonelected. A complete reply to the final rejection must include cancelation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

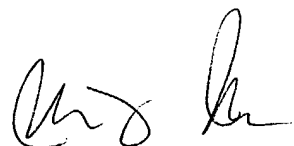
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Virginia Manoharan whose telephone number is (571) 272-1450. The examiner can normally be reached on Tuesday-Friday from 7:00a.m to 6:00p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola, can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9311.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-fr

Manoharan/tgd

March 15, 2004

  
VIRGINIA MANOHARAN  
PRIMARY EXAMINER  
ART UNIT 133 /key